



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/896,395	06/29/2001	Brian K. Langendorf	42390 P10570	1007

7590 04/17/2003

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN  
12400 Wilshire Boulevard, Seventh Floor  
Los Angeles, CA 90025-1026

EXAMINER

MYERS, PAUL R

ART UNIT PAPER NUMBER

2189

DATE MAILED: 04/17/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/896,395

**Applicant(s)**

LANGENDORF ET AL.

**Examiner**

Paul R. Myers

**Art Unit**

2189

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s)    is/are withdrawn from consideration.
- 5) ☐ Claim(s)    is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s)    is/are objected to.
- 8) ☐ Claim(s)    are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on    is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on    is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No.   .
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s).
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein PN 5,968,139 in view of PCI System Architecture.

In regards to claims 1, 12, 18, 21 and 24-25: Klein teaches a first storage (56) to store a plurality of data, said first storage responsive to one or more of a plurality of control signals to transfer selected parts of said data to a host; a monitor circuit (54 see also figure 2), coupled to said host to track processor initiated host bus cycles and to identify processor initiated host bus read cycles target to a virtual (Column 1 lines 56-65 "virtual device") PCI (Column 2 lines 62-32 While the invention is directed to virtual IDE devices Klein expressly states the device can be PCI) device logically residing behind a primary PCI bus (62), wherein the primary PCI bus is coupled to said host bus; wherein said monitor circuit is to generate said plurality of control signals to transfer a selected one or more said data to said host bus during one or more of said identified host bus read cycles targeted to said virtual PCI device. Klein does not teach the precise architecture claimed. PCI System Architecture teaches a large number of PCI architecture including architectures in which the memory and controller is coupled to the host bus through a path that is separate from the Bridge (for example figures 16-2, 19-1, 19-2 and 19-

Art Unit: 2189

19). It would have been obvious to use any of the bus architectures described in the PCI system architecture because this would have allowed for greater system flexibility.

In regards to claims 2, 16 and 30: Klein teaches a PCI-PCI bridge. PCI System Architecture teaches multiple devices past the Bridge including multiple PCI-PCI bridges (Bridges A-F).

In regards to claims 3, 6, 11 and 22: Klein teaches the device being behind the Bridge. PCI System Architecture teaches the device behind the bridge including PCI-PCI bridges. Klein also teaches write cycles.

In regards to claim 4: Klein is silent upon integration. MPEP 2144.04 V B states to make integral is not a patentable distinction.

In regards to claim 5: Klein does not teach the use of an internal processor bus. Official notice is taken that internal processor buses are well known. It would have been obvious to a person of ordinary skill in the art to use a processor bus because this would have allowed for independent processing.

In regards to claims 7, 13 and 20: Klein teaches the memory being a random access memory (DRAM) and having address space.

In regards to claims 8, 10, 15, 17, 19, 23 and 29: Klein teaches configuration/control registers (84).

In regards to claims 9 and 14: Klein teaches I/O.

In regards to claim 28: PCI System Architecture teaches Snooping.

Art Unit: 2189

***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul R. Myers whose telephone number is 703 305 9656. The examiner can normally be reached on Mon-Thur 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on 703 305 4815. The fax phone numbers for the organization where this application or proceeding is assigned are 703 746 7239 for regular communications and 703 746 7239 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305 3900.



PRM  
April 14, 2003

PAUL R. MYERS  
PRIMARY EXAMINER